

IN THE CLAIMS:

Please cancel claims 11-13, 16 and 17, amend claims 1 and 19, and add new claim 20, as shown below in the detailed listing of all claims which are, or were in this application:

1. (Currently amended) Process for the production of an assembly comprising several silicone elements crosslinked by the polyaddition of $\equiv\text{Si}-\text{H}$ units onto $\equiv\text{Si}-\text{alkenyl}$ units, said elements adhering firmly to one another, comprising the following essential steps:

- (I) forming a silicone element (i) with a liquid silicone preparation (i) comprising:
 - polyorganosiloxanes (POS) A with $\equiv\text{Si}-\text{alkenyl}$ units,
 - polyorganosiloxanes (POS) B with $\equiv\text{Si}-\text{H}$ units,
 - at least one metal catalyst C,
 - optionally at least one POS resin D carrying $\equiv\text{Si}-\text{alkenyl}$ units,
 - optionally at least one crosslinking inhibitor E,
 - optionally at least one adhesion promoter F,
 - optionally at least one mineral filler G,

- optionally at least one functional additive H for imparting specific properties,
- (II) crosslinking the liquid silicone preparation (i) formed in step (I), the composition of this preparation and the crosslinking conditions being chosen in such a way that the crosslinked silicone element (i) has a surface density SD of unreacted, residual alkenyl groups, per nm², [[defined as follows: SD ≥ 0.0015,]] equal to or greater than 0.035,
- (III) optionally repeating steps (I) and (II) n times (n = positive integer) to give n elements (i) that adhere to one another,
- (IV) forming a silicone element (ii) by bringing the crosslinked silicone element or last crosslinked silicone element (i) into contact with a liquid silicone preparation (ii) comprising:
 - polyorganosiloxanes (POS) A' with =Si-alkenyl units,
 - polyorganosiloxanes (POS) B' with =Si-H units,
 - at least one metal catalyst C', [[,]]
 - optionally at least one POS resin D' carrying =Si-alkenyl units,
 - optionally at least one crosslinking inhibitor E',
 - optionally at least one adhesion promoter F',

- optionally at least one mineral filler G',
- optionally at least one functional additive H' for imparting specific properties,
- (v) crosslinking the liquid silicone preparation (ii) formed in step (IV) to give the crosslinked silicone element (ii) that adheres to the element or last element (i).

2. (Previously presented) Process according to claim 1, wherein a ratio R of the =Si-H units to the =Si-alkenyl units in the selected liquid silicone preparation (i) is defined as follows:

$$R \leq 1.$$

3. (Previously presented) Process according to claim 2, wherein the selected liquid silicone preparation (i) comprises at least one hyperalkenylated POS A providing =Si-alkenyl units, whose content is greater than or equal to at least 2% by number, the =Si-alkenyl units advantageously being carried essentially by siloxy units D: $-R_2SiO_{2/3}-$.

4. (Previously presented) Process according to claim 1, wherein:

- the assembly produced comprises a flexible substrate and several crosslinked silicone elements forming a multilayer coating adhering to the substrate;
- and:
 - step (I) comprises applying the liquid silicone preparation (i) to the substrate to form a crosslinked silicone layer (i),
 - and step (IV) comprises applying the liquid silicone preparation (ii) to the crosslinked silicone layer or last crosslinked silicone layer (i) carrying residual reactive groups on the surface, to form a crosslinked silicone layer (ii).

5. (Previously presented) Process according to claim 1, wherein the assembly produced is a silicone mold or molded object.

6. (Previously presented) Process according to claim 1, wherein steps (IV) and (V) are only carried out after a prolonged interruption of the process.

7. (Previously presented) Process according to claim 4, wherein the second and last liquid silicone preparation is different from the first and is devoid of hyperalkenylated POS A°.

8. (Previously presented) Process according to claim 1, wherein the chosen POS (A & A') have siloxy units of the formula



in which:

- the symbols W, which are identical or different, are each an alkenyl group;
- the symbols Z, which are identical or different, are each a non-hydrolyzable monovalent hydrocarbon group that is devoid of an unfavorable action on the activity of the catalyst, is optionally halogenated and is selected from alkyl groups having from 1 to 8 carbon atoms inclusive, and from aryl groups;
- a is 1 or 2, b is 0, 1 or 2 and a + b is between 1 and 3;
- optionally at least some of the other units are units of the empirical formula



in which Z is defined as above and c has a value of between 0 and 3.

9. (Previously presented) Process according to claim 1, wherein the chosen POS (B & B') have siloxy units of the formula



in which:

- the symbols L, which are identical or different, are each a non-hydrolyzable monovalent hydrocarbon group that is devoid of an unfavorable action on the activity of the catalyst, is optionally halogenated and is selected from alkyl groups having from 1 to 8 carbon atoms inclusive, and from aryl groups;
- d is 1 or 2, e is 0, 1 or 2 and d + e has a value of between 1 and 3;
- optionally at least some of the other units being units of the empirical formula



in which L is as defined above and g has a value of between 0 and 3.

10. (Previously presented) Process according to claim 1, wherein the alkenyl groups W of the POS (A & A') and/or of the POS resins (D & D') are vinyl groups Vi carried by siloxy units D and optionally M and/or T.

Claims 11-13 (Canceled)

14. (Previously presented) The process of claim 1, wherein said \equiv Si-alkenyl units comprise \equiv Si-vinyl units.

15. (Previously presented) The process of claim 1, wherein said residual alkenyl groups comprise vinyl groups.

16. (Canceled)

17. (Canceled)

18. (Previously presented) The process of claim 3, wherein said liquid silicone preparation (i) comprises at least one hypervinylated POS A providing \equiv Si-vinyl units whose content is between 3 and 10% by number.

19. (Currently amended) The process of [[claim 9]] claim 1,
wherein said alkenyl group is a C₂-C₆ alkenyl group.

20. (New) The process of claim 2, wherein the ratio R of the =Si-H units to the =Si-alkenyl units in the selected liquid silicone preparation (i) is defined as follows:

$$0.80 \leq R \leq 0.98.$$